

ESP - 193-1

Approved 24 May 1966

25X1



(007 20177)

Lockheed Aircraft Corp.		ENGINEERING STUDY <input checked="" type="checkbox"/>	CHANGE PROPOSAL <input type="checkbox"/>		IAC 193-1					
DATE 22 APRIL 1966		AFFECTS : WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : FLT. TEST - SENSITIVE TAPE ALTIMETER & AIR DATA COMPUTER										
NATURE OF PROPOSAL :										
SEE PAGE 2										
REASON FOR PROPOSAL :										
TO EVALUATE PILOT PRESENTATION OF TWO DIFFERENT ALTIMETER PRESENTATIONS; ESTABLISH INDICATOR - AIR DATA COMPUTER (ADC) ACCURACIES, AND UTILIZE OTHER ADC OUTPUT.										
SEE PAGE 2										
ES	ESTIMATED COST AND TIME INVOLVED : SP-1923				25X1					
ADDITIONAL FUNDING REQUIRED : SP-1923 (YES)										
CP	ESTIMATED COST FOR KITS OR PARTS :									
ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :										
SAFETY <input checked="" type="checkbox"/>	MISSION EFFECTIVENESS <input checked="" type="checkbox"/>	PERFORMANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER-CHANGEABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input checked="" type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input checked="" type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input checked="" type="checkbox"/>	FLIGHT MANUAL <input checked="" type="checkbox"/>	MAINTENANCE MANUAL <input checked="" type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT ADP/VENDOR/GIFAE				AVAILABILITY _____ WEEKS AFTER APPROVAL SEE PAGE 3						
DISPOSITION OF SPARES AFFECTED NONE										
INITIATED BY : CUSTOMER				APPROVED : WSPO <i>Signal 0/16</i>						

NATURE OF PROPOSAL:

PHASE I

INSTALL & FLIGHT TEST (1 FLIGHT) AT CONTRACTORS FACILITY:

1. BENDIX AIR DATA COMPUTER.
2. BENDIX TYPE 10900-1A-1-A1 TAPE ALTIMETER.
3. KOLLMAN A36932-10-003 POINTER-COUNTER ALTIMETER.
4. AFCS MACH CONTROL FROM ADC DELTA MACH.
5. TOTAL TEMPERATURE PROBE.
6. A/O PANEL FOR FOLLOWING:
  - a. TAPE ALTIMETER
  - b. POINTER COUNTER ALTIMETER
  - c. STANDARD BAROMETRIC ALTIMETER
  - d. ADC CALIBRATED AIR SPEED
  - e. STANDARD INDICATED AIR SPEED
  - f. ADC TRUE AIR SPEED
  - g. ADC MACH
  - h. EVENT LIGHT FOR COORDINATION WITH EAFB ASKANIA  
CAMERA RANGE
  - i. CLOCK
  - j. SENSITIVE OAT

The altimeters are being obtained from GFE stock and will require calibration, and possibly some refurbishment, prior to flight. The ADC has been obtained on a loan basis from Bendix. A total temp. probe is available at the contractors.

PHASE II TO BE CONDUCTED AT EAFB

TEST PROGRAM TO BE ACCOMPLISHED IN TWO PARTS

PART 1: Four flights with all equipment mounted on A.O. panel and hatch mounted camera to establish data required to produce mach compensated cam. (Flights made with flat cam.)

PART 2: Three flights to determine the degree of accuracy obtained from the compensated system and to allow drivers time to evaluate altimeter presentations during simulated penetrations and let downs.

A short time span will be required between Part 1 and Part 2 to allow the vendor time to compute the cam shape and then cut the cam.

## PRICE BREAKDOWN:

PHASE I

Fabrication & installation of parts, equipment, and instrumentation  
in Art. #348

25X1

PHASE II

ADP support - engineering & flight test of Art. #348 during  
Customer conducted testing at EAFB

## TOTAL ESTIMATED PROGRAM

NOTE: We are proceeding with Phase I per telecon  
4-8-66 - Ref: ADP - Van Nuys Msg #1830

25X1

SCHEDULE

6 - 13 MAY 1966	KIT INSTALL	a	Contractors
16 - 20 MAY 1966	FLTS. NO. 1 & 2	a	Contractors & EAFB
23 - 27 MAY 1966	FLTS. NO. 3 & 4	a	EAFB
30 MAY - 10 JUNE 1966	FAB CAM		
13 - 22 JUNE 1966	FLTS. NO. 5, 6 & 7	a	EAFB